

5'	TGCAG	ATT	GGT	TGG	GGC	AGC	CCG	GGG	AGG	CTG	GCT	CCG	ACA	CAC	GAC	TGA	GTG	TGC	56
11																			47
	CTA	CAC	TGG	TCC	CAC	AGG	TTT	TCA	GCT	GTG	GAG	TTT	GGG	ATC	TGA	GCT	TGG	AGC	110
65																			101
	CCA	TTT	GTT	TCT	GGC	AGT	TCC	GCT	CAT	ATT	TTC	CAC	TTG	AAG	ACA	TCG	CCT	CCC	164
119																			155
	TTC	CTT	CCA	AGC	TGG	GAG	ACC	AGA	AGT	CAA	CAA	CAG	GAG	GGT	GGA	GAG	GCC	GGG	218
173																			209
	TCT	CAC	AAT	CCG	CTT	GGC	TGG	GGA	GTC	CAC	TGA	GGT	TCT	TGC	ATC	CTG	AAG	CAA	272
227																			263
	ACC	ATG	GAG	AGC	TGG	TGG	GGA	CTT	CCC	TGT	CTT	GCG	TTC	CTG	TGT	TTT	CTA	ATG	326
281																			317
	M	E	S	W	W	G	L	P	C	L	A	F	L	C	F	L	M		
	CAC	GCC	CGA	GGT	CAA	AGA	GAC	TTT	GAT	TTG	GCA	GAT	GCC	CTT	GAT	GAC	CCT	GAA	380
335																			371
	H	A	R	G	Q	R	D	F	D	L	A	D	A	L	D	D	P	E	
	CCC	ACC	AAG	AAG	CCA	AAC	TCA	GAT	ATC	TAC	CCA	AAG	CCA	AAA	CCA	CCT	TAC	TAC	434
389																			425
	P	T	K	K	P	N	S	D	I	Y	P	K	P	K	P	P	Y	Y	

FIGURE 1A

443	452	461	470	479	488
CCA CAG CCC GAG AAT CCC GAC AGC GGT GGA AAT ATC TAC CCA AGG CCA AAG CCA					
P Q P E N P P D S G G N I Y P R P K P					
497	506	515	524	533	542
CGC CCT CAA CCC CAG CCT GGC AAT TCC GGC AAC AGT GGA GGT TAC TTC AAT GAT					
R P Q P P Q P G N S G N S G G Y F N D					
551	560	569	578	587	596
GTG GAC CGT GAT GAC GGA CGC TAC CCG CCC AGG CCA CGG CCG CCT GCA					
V D R D D G G R Y P P R P R P P A					
605	614	623	632	641	650
GGA GGT GGC GGC GGT GGC TAC TCC AGT TAT GGC AAC TCC GAC AAC ACG CAC GGA					
G G G G G G Y S S Y G N S D N T H G					
659	668	677	686	695	704
AGA GGG GGC TAT AGA CCC AAC TCT CGT TAT GGA AAT ACT TAT GGT GGA GAT CAC					
R G G Y R P N S R Y G N T Y G G D H					
713	722	731	740	749	758
CAT TCA ACG TAT GGC AAT CCA GAA GGC AAT ATG GTA GCA AAA ATC GTG TCT CCC					
H S T Y G N P E G G N M V A K I V S P					
767	776	785	794	803	812
ATC GTA TCC GTG GTG GTG GTG ACA CTG GGA GCA GCA GCC AGT TAT TTC AAA					
I V S V V V V T L L G A A A S Y F K					

FIGURE 1B

Figure 1C

821	830	839	848	857	866
CTA AAC AAT AGG AGA AAT TGT TTC AGG ACC CAT GAA CCA GAA AAT GTC TGA AGA					
L N N R R N C F R T H E P E N V					
875	884	893	902	911	920
TGT TAA GAT CCC CTG ATT ACT TTG GGA AAA ACA ACT AAA ACA ACC GTG TTT					
929					
ATC AAA AAA AAA AAA 3'					

FIGURE 1C

1	MESWWGLPCLAFLCFLMHARGQRDFDLADA	2297891
1	MESWWGLPCLAFLCFLMHARGQRDFDLADA	GI 2499136
31	LDDPEPTKKPNSDIYPPKPPYYPQPENPD	2297891
31	LDDPEPTKKPNSDIYPPKPPYYPQPENPD	GI 2499136
61	SGGNIYPRPKPRPQPQPPGNSGNSGGYFNDDV	2297891
61	SGGNIYPRPKPRPQPQPPGNSGNSGGYFNDDV	GI 2499136
91	DRDDGRYPYPRPYPYPRPYPYPRPYPYGN S	2297891
91	DRDDGRYPYPRPYPYPRPYPYPRPYPYGN S	GI 2499136
121	DNTHGGRGYRPNSTRYGN TYGGDHHSTYGNP	2297891
121	DNTHGGRGYRPNSTRYGN TYGGDHHSTYGNP	GI 2499136
151	EGNMMVAKIVSPIVSVVVVTL LGAAASYFKL	2297891
136	EGNMMVAKIVSPIVSVVVVTL LGAAASYFKL	GI 2499136
181	NNRRNCFRTHPEPENV	2297891
166	NNRRNCFRTHPEPENV	GI 2499136

FIGURE 2

5' GAGAG AAT AGC TAC AGA TTC TCC ATC CTC AGT CTT TGC AAG GCG ACA GCT GTG CCA 56

11 20 29 38 47

GCC GGG CTC TGG CAG GCT CCT GGC AGC ATG GCA GTG AAG CTT GGG ACC CTC CTG 110

65 74 83 92 101

M A V K L G T L L

CTG GCC CTT GCC CTG GGC CTG GCC CAG CCA GCC TCT GCC CGC AAG CTG CTG 164

119 128 137 146 155

L A L A L G L A Q P A S A R R K L L

GTG TTT CTG CTG GAT GGT TTT CGC TCA GAC TAC ATC AGT GAT GAG GCG CTG GAG 218

173 182 191 200 209

V F L L D G G F R S D Y I S D E A L E

TCA TTG CCT GGT TTC AAA GAG ATT GTG AGC AGG GGA GTA AAA GTG GAT TAC TTG 272

227 236 245 254 263

S L P G G F K E I V S R G V K V D Y L

ACT CCA GAC TTC CCT AGT CTC TCG TAT CCC AAT TAT TAT ACC CTA ATG ACT GGC 326

281 290 299 308 317

T P D F P S L S Y P N Y Y T L M T G

CGC CAT TGT GAA GTC CAT CAG ATG ATC GGG AAC TAC ATG TGG GAC CCC ACC ACC 380

335 344 353 362 371

R H C E V H Q M I G N Y M W D P T T

FIGURE 3A

389	398	407	416	425	434
AAC AAG TCC TTT GAC ATT GGC GTC AAC AAA GAC AGC CTA ATG CCT CTC TGG TGG					
N K S F D I G V N K D S L M P L W					
443	452	461	470	479	488
AAT GGA TCA GAA CCT CTG TGG GTC ACT CTG ACC AAG GCC AAA AGG AAG GTC TAC					
N G S E P L W V T L T K A K R K V Y					
497	506	515	524	533	542
ATG TAC TAC TGG CCA GGC TGT GAG GTT GAG ATT CTG GGT GTC AGA CCC ACC TAC					
M Y Y W P G C E V E I L G V R P T Y					
551	560	569	578	587	596
TGC CTA GAA TAT AAA AAT GTC CCA ACG GAT ATC AAT TTT GCC AAT GCA GTC AGC					
C L E Y K N V P T D I N F A N A V S					
605	614	623	632	641	650
GAT GCT CTT GAC TCC TTC AAG AGT GGC CGG GCC GAC CTG GCA GCC ATA TAC CAT					
D A L D S F K S G R A D L A A I Y H					
659	668	677	686	695	704
GAG CGC ATT GAC GTG GAA GGC CAC CAC TAC GGG CCT GCA TCT CCG CAG AGG AAA					
E R I D V E G H H Y G P A S P Q R K					
713	722	731	740	749	758
GAT GCC CTC AAG GCT GTA GAC ACT GTC CTG AAG TAC ATG ACC AAG TGG ATC CAG					
D A L K A V D T V L K Y M T K W I Q					

FIGURE 3B

767	GAG CGG GGC CTG CAG GAC CGC CTG AAC GTC ATT ATT TTC TCG GAT CAC GGA ATG	776	785	794	803	812
	E R G L Q D R L N V I I F S D H G M					
821	ACC GAC ATT TTC TGG ATG GAC AAA GTG ATT GAG CTG AAT AAG TAC ATC AGC CTG	830	839	848	857	866
	T D I F W M D K V I E L N K Y I S L					
875	AAT GAC CTG CAG CAA GTG AAG GAC CGC GGG CCT GTT GTG AGC CTT TGG CCG GCC	884	893	902	911	920
	N D L Q Q V K D R G P V V S L W P A					
929	CCT GGG AAA CAC TCT GAG ATA TAT AAC AAA CTG AGC ACA GTG GAA CAC ATG ACT	938	947	956	965	974
	P G K H S E I Y N K L S T V E H M T					
983	GTC TAC GAG AAA GAA GCC ATC CCA AGC AGG TTC TAT TAC AAG AAA GGA AAG TTT	992	1001	1010	1019	1028
	V Y E K E A I P S S R F Y Y K K G K F					
1037	TCT CCT TTG ACT TTA GTG GCT GAT GAA GGC TGG TTC ATA ACT GAG AAT CGA	1046	1055	1064	1073	1082
	V S P L T L V A D E G W F I T E N R					
1091	GAG ATG CTT CCG TTT TGG ATG AAC AGC ACC GGC AGG CGG GAA GGT TGG CAG CGT	1100	1109	1118	1127	1136
	E M L P F W M N S T G R R E G W Q R					

FIGURE 3C

1145	1154	1163	1172	1181	1190
GGA TGG CAC GGC TAC GAC AAC GAG CTC ATG GAC ATG CGG GGC ATC TTC CTG ACT					
G W H G G Y D N E L M D M R G I F L T					
1199	1208	1217	1226	1235	1244
CTC GGA CCT GGT AGG CGA GGA AAT GAC CAG ATG CTC TCA GAC CCC ATT CCC AAG					
L G P G G R R G N D Q M L S D P I P K					
1253	1262	1271	1280	1289	1298
GAA GTG TCT CTA AGG GGC CCT ACG GGT GCC AGG AGA GGC TGC AGG GAT TTC CTC					
E V S L R G G P T G A R R G C R D F L					
1307	1316	1325	1334	1343	1352
ACA GAC CCT CTT TAT GAG CCA AGC AGA GCA AAC CCA GCC GGT CTC CAT GAA ACA					
T D P L Y E P S R A N P A G L H E T					
1361	1370	1379	1388	1397	1406
TCT TTT GCT GGC TTC CTT TCA AAT GCT TCT TGG GTT TGG CAA ATG TAG CCA AAT					
S F A G G F L S N A S W V W Q M					
1415	1424	1433			
ACT GTG CCG TGT AAA TTT TAA ATC CTG CAG CA 3'					

FIGURE 3D

27	L	V	F	L	L	D	G	F	R	S	D	-	E	A	L	E	S	L	P	G	F	K	E	I	V	S	2705267				
161	L	L	F	S	L	D	G	F	R	A	E	Y	L	H	T	W	G	G	L	-	-	L	P	V	I	S	K	L	K	K	GI 189650
56	R	G	V	K	V	D	Y	L	T	P	D	F	P	S	L	S	Y	P	N	Y	Y	T	L	M	T	G	R	H	C	E	2705267
189	C	G	T	Y	T	K	N	M	R	P	V	Y	P	T	K	T	F	P	N	H	Y	S	I	V	T	G	L	Y	P	E	GI 189650
86	V	H	Q	M	I	G	N	Y	M	W	D	P	T	T	N	K	S	F	D	I	G	V	N	K	D	S	L	M	P	L	2705267
219	S	H	G	I	I	D	N	K	M	Y	D	P	K	M	N	A	S	F	S	L	K	-	S	K	E	K	F	N	P	E	GI 189650
116	W	W	N	G	S	E	P	L	W	V	T	L	T	K	A	K	R	K	V	Y	M	Y	Y	W	P	G	C	E	V	E	2705267
248	W	Y	K	G	-	E	P	I	W	V	T	A	K	Y	Q	G	L	K	S	G	T	F	F	W	P	G	S	D	V	E	GI 189650
146	I	L	G	V	R	P	T	Y	C	L	E	Y	K	N	V	P	T	D	I	N	F	A	N	A	V	S	D	A	L	D	2705267
277	I	N	G	I	F	P	D	I	-	-	-	Y	K	M	Y	N	G	S	V	P	F	E	E	R	I	L	A	V	L	Q	GI 189650
176	S	F	-	-	-	K	S	G	R	A	D	L	A	A	I	Y	H	E	R	I	D	V	E	G	H	H	Y	G	P	A	2705267
304	W	L	Q	L	P	K	D	E	R	P	H	F	Y	T	L	Y	L	E	P	D	S	S	G	H	S	Y	G	P	V	GI 189650	
203	S	P	Q	R	K	D	A	L	K	A	V	D	T	V	L	K	Y	M	T	K	W	I	Q	E	R	G	L	Q	D	R	2705267
334	S	S	E	V	I	K	A	L	Q	R	V	D	G	M	V	G	M	L	M	D	G	L	K	E	L	N	L	H	R	C	GI 189650

FIGURE 4A

